CLAIMS

1. Method of manufacturing, from a strip of possibly perforated sheet material (17), a structured packing corrugation (1), the overall surface of which is generated substantially by sweeping a repetitive profile (4) parallel to the edges (2, 3) of the strip, along a directrix (8) which is non-rectilinear over at least part of its length and having a main orientation which is oblique with respect to the edges of the strip, in which a folding-pressing operation is carried out on the strip (17) in successive steps, by means of two opposed dies (11, 12) with a relative movement alternating between coming together and moving apart, these dies having active surfaces (11, 12) which are substantially conjugate with the two faces of the corrugation, characterized in that the strip is made of metal.

2. Method according to Claim 1, characterized in that, in at least one non-rectilinear region, at least some convex apexes (13A to 16A) of at least one die (11, 12) have a reduced height compared with that of an adjacent rectilinear region.

3. Method according to Claim 2, characterized in that all the convex apexes of the two dies (11, 12) have a reduced height in each or one non-rectilinear region.

4. Method according to Claim 2 or 3, characterized in that the said reduction in height is progressive from the said adjacent rectilinear region.

5. Method according to any one of Claims 1 to 4, characterized in that the strip (17) is perforated before the folding-pressing operation is carried out.

6. Method according to any one of Claims 1 to 5, characterized in that the strip (17) is annealed before it undergoes folding-pressing, at least in the regions of this strip which correspond to the non-rectilinear regions (10) of the directrix (8).

7. Method according to any one of Claims 1 to 6, characterized in that the directrix (8) has a rectilinear main part (9) and at least one curved end part (10) which ends substantially perpendicular to the edges (2, 3) of the corrugation (1).

8. Method according to Claim 7, characterized in that the directrix (8) has an elongate S-shape, with a rectilinear main part (9) and two curved end parts (10) which end substantially perpendicular to the edges (2, 3) of the corrugation (1).

9. Method according to any one of Claims 1 to 8, characterized in that the profile (4) is zig-zag shaped with substantially rectilinear sides (5).

10. Method according to any one of Claims 1 to 9, characterized in that the corrugation (1) is a cross-corrugated packing corrugation.

11. Method according to any one of Claims 1 to 10, comprising the step of making the sheet-metal strip (17) advance in successive steps between the dies in the open position thereof.

12. Device for implementing the method according to any one of Claims 1 to 11, characterized in that it comprises two opposed folding-pressing dies (11, 12), the generatrices of which comprise at least one non-rectilinear part, means to move these dies with a relative movement alternating

between coming together and moving apart, and means (17, 18) to make a strip (17) of sheet material advance in successive steps between the dies in the open position thereof.

13. Device according to Claim 12, characterized in that, in at least one non-rectilinear region, at least some convex apexes (13A to 16A) of at least one die (11, 12) have a height which progressively decreases from an adjacent rectilinear region.

14. Device according to Claim 13, characterized in that all the convex apexes of the two dies (11, 12) have a height which progressively decreases in one or each non-rectilinear region.

15. Device according to any one of Claims 12 to 14, characterized in that it comprises means (B) for annealing the strip (17) at least in the region or regions thereof intended to be folded in a non-rectilinear manner, these annealing means being located upstream of the dies (11, 12).

16. Device according to Claim 15, characterized in that the said annealing means (B) are located downstream or upstream of the perforation means (C).

17. Apparatus for treating fluids, especially for the exchange of heat and/or mass between two fluids, characterized in that it comprises at least one working section (20) equipped with a cross-corrugated packing consisting of corrugations (1) made by a method according to any one of Claims 1 to 11.